extend across the fuel rod located nearest the cruciform center. These recesses are filled with moderator such that the consumption of fissile material in adjacent fuel rods increases. By arranging the absorber material in this way, it is possible to considerably extend the duration of an operating cycle for a reactor.

In the Claims:

Please cancel claims 1, 4, and 5 without prejudice and amend the remaining claims as follows:

2. (Amended) A control rod according to claim [1] 13, characterized in that the length of the upper part [(15)] constitutes at most one-third of the length of the absorber blade.

3. (Amended) A control rod according to claim [1] 13, characterized in that said inner part in at least some portion constitutes at least one-third of the width of the absorber blade.

6. (Amended) A control rod according to claim [1] 13, characterized in that the absorber blades comprise a plurality of radially arranged channels [(13, 14)] in which the absorber material is arranged, whereby at least the majority of the channels [(13)] in the upper part [(15)] are shorter than the channels [(14)] in the lower part [(16)] of the absorber blades.

7. (Amended) A control rod according to claim 6, characterized in theat the channels [(13, 14)] in the upper part [(15)] and the lower part [(16)] have a diameter [(d)] of essentially

equal size.

8. (Amended) A control rod according to claim [1] 13, characterized in that the absorber blades [(6, 7, 8, 9)] comprise a plurality of channels [(22, 23, 24)], arranged axially in relation to the control rod, in which the absorber material is arranged, whereby at least the majority of the channels [(22)] are arranged radially outside one or more channels [(23, 24)] which are arranged nearest the cruciform [centre (10)] center.

9. (Amended) A control rod according to claim 8, characterized in that the channels [(23, 24)] arranged nearest the cruciform [centre] center [(10)] are shorter than the channels [(22)] arranged in the outer part of the absorber blades [(6, 7, 8, 9)], arranged radially outside said cruciform [centre] center.

10. (Amended) A control rod according to claim 9, characterized in that the channels [(23, 24)] arranged nearest the cruciform [centre] center [(10)] and the channels [(22)] arranged in the outer part of the absorber blades [(6, 7, 8, 9)], arranged radially outside said cruciform [centre] center, have a diameter [(d)] of essentially equal size.

11. (Amended) A control rod according to claim [1] 13, characterized in that the absorber material consists of boron and/or hafnium.

12. (Amended) A control rod according to claim [1] 13, characterized in that the absorber material consists of boron carbide and/or hafnium metal.

Clean copy of amended claims:

B3

2. (Amended) A control rod according to claim 13, characterized in that the length of the upper part constitutes at most one-third of the length of the absorber blade.

3. (Amended) A control rod according to claim 13, characterized in that said inner part in at least some portion constitutes at least one-third of the width of the absorber blade.

B4 Cont.

6. (Amended) A control rod according to claim 13, characterized in that the absorber blades comprise a plurality of radially arranged channels in which the absorber material is arranged, whereby at least the majority of the channels in the upper part are shorter than the channels in the lower part of the absorber blades.

7. (Amended) A control rod according to claim 6, characterized in theat the channels in the upper part and the lower part have a diameter of essentially equal size.

8. (Amended) A control rod according to claim 13, characterized in that the absorber blades comprise a plurality of channels, arranged axially in relation to the control rod, in which the absorber material is arranged, whereby at least the majority of the channels are arranged radially outside one or more channels which are arranged nearest the cruciform center.

9. (Amended) A control rod according to claim 8, characterized in that the channels arranged nearest the cruciform center are shorter than the channels arranged in the outer part of

the absorber blades, arranged radially outside said cruciform center.

B4 Cancel.

10. (Amended) A control rod according to claim 9, characterized in that the channels arranged nearest the cruciform center and the channels arranged in the outer part of the absorber blades, arranged radially outside said cruciform center, have a diameter of essentially equal size.

11. (Amended) A control rod according to claim 13, characterized in that the absorber material consists of boron and/or hafnium.

12. (Amended) A control rod according to claim 13, characterized in that the absorber material consists of boron carbide and/or hafnium metal.

Please enter the following new claims:

B5 Cont.

13. A control rod for a boiling water reactor, comprising:

four absorber blades forming an orthogonal cross with a cruciform centre, the absorber blades having a width in a radial direction of the control rod and a length in a longitudinal direction of the control rod, wherein each absorber blade comprises a neutron-absorber material distributed along its length, wherein the control rod comprises an upper part and lower part that comprise a whole length portion of the control rod that is provided with the neutron-absorber material, wherein a mean value of a quantity of absorber material per unit of length of the control rod is smaller in the upper part of the control rod than in the lower part, wherein the upper part of each absorber blade comprises an inner part and an outer part, wherein the inner part is arranged radially inside the outer part, wherein the outer part is provided with the neutron-absorber

material whereas the inner part lacks neutron-absorber material, wherein the inner part, in at least some portion of the upper part, comprises at least one-fourth of the width of the absorber blade, wherein a first plurality of recesses are arranged in the absorber blade along the cruciform center of the control rod in the inner part of the upper part, wherein a second plurality of recesses are arranged in the absorber blade along the cruciform center of the control rod in the lower part of the control rod, the first and second plurality of recesses being made as through-holes through the absorber blade, wherein the recesses in the upper part are wider than at least a majority of the recesses in the lower part.

14. A control rod, comprising:

four forming an orthogonal cross having a cruciform center and having an upper part, a lower part, an inner part proximal to the cruciform center, an outer part distal to the cruciform center, a width in a radial direction of the blade and a length in a longitudinal direction of the blade, wherein over at least a portion of the upper part the inner part comprises at least one-quarter of a width of each absorber blade, wherein neutron absorbing material is arranged in the outer part of each blade and neutron absorbing material is not arranged in the inner part of each blade and wherein a mean quantity of absorber material per unit length of the control rod is less in the upper part than in the lower part; and

a plurality of recesses comprising through holes through the absorber blades and arranged in the inner part of the blades along the cruciform center, wherein recesses arranged in the upper part of the blades are wider than at least a majority of recesses arranged in the lower part of the blades.